

COURSE DESCRIPTION

University: Comenius University Bratislava	
Faculty: Faculty of Management	
Course ID: FM.KIS/014AB/16	Course title: Information Systems and Application Software
Educational activities: Type of activities: lecture / seminar Number of hours: per week: 2 / 2 per level/semester: 28 / 28 Form of the course: on-site learning	
Number of credits: 5	
Recommended semester: 2.	
Educational level: I., II.	
Prerequisites:	
Course requirements: The active participation on lectures and seminars (practical) on computers in MS Windows, MS Excel. Required: Students who participate in online Seminars must use the Microsoft Windows operating system with the Microsoft Office package installed (from 2022/2023). Examination: - Lectures: Midterm mandatory examination from lectures either via Midterm test, or Midterm semester work in MS Word to achieve credit (points) for the Final exam of the course; the semester ends with Final exam either in a written form (test) on-site, or the oral form online via MS Teams. - Seminars (practical): Semester ends with project work in MS Word, to achieve credit (points) for the Final exam of the course. Scale of 100% assessment is split: 40% lectures: Midterm test/work (15 points) and Final test/oral exam (25 points). 60% seminar (practical): MS Word (60 points). The necessary condition for successful completion of the course is a minimum limit of 60% of each activity. In points: minimum 36 points from seminar (practical), to be able to participate on final test/exam, and minimum 24 points from the lectures (the sum of Midterm and Final examination). Details for the seminar (practical) project: 1. Elaboration of project outline Deadline: according to the teacher's instructions (or by e-mail to the specified e-mail address), usually by mid-March. 2. Project elaboration Deadline: no later than the end of the teaching part of the semester, preferably at the last seminar, but always in electronic form to the address according to the instructions of the teacher. 3. The acquired knowledge from seminar is verified during the teaching part of the semester and forms an ongoing assessment. For submitting the project on time and successful project defense, the student can get additional points in the continuous assessment. However, each teacher determines the details of the continuous assessment. It is recommended to defend the project in front of the whole study group. The project defense usually may include a written and an oral checkout (theoretical and practical at the computer). Scale of assessment (preliminary/final): 60/40	

Learning outcomes:

Lectures: The knowledge of the presented topics and the related business value, an in-depth insight how the business firms use information systems and application software, point out the key issues and problems which the users and managers face when developing and implementing an information system.

Practical: The knowledge of Microsoft Office Suite, mainly MS Excel, and use the tool for solving different problems of managerial practice, financial and analytical tasks, statistical data processing, for example, for marketing research and everyday practical problems which managers encounter in finance, too.

Class syllabus:

Lectures:

1. Basic concept.

Components and functions of information systems, managerial and strategic roles of information systems. Other behavioral, managerial and technical concepts are presented.

2. Technology.

Major trends and implications for management in relation to computer hardware, software, database management, and telecommunications technologies.

3. Application.

How the information technologies are used in modern information systems to support collaboration among (end) users, in business, in managerial decision-making and in attaining strategic advantage.

4. Development.

Development of information systems for business with different approaches to software development and implementation of changes using information technologies.

5. Management.

Challenges set by information and communication technologies and management of information systems, technologies, activities and resources, including information, global IT management, security and ethical challenges.

Seminar (Practical):

1. Intro to MS Excel, absolute and relative addresses, lists, etc.

2. Increasing the productivity of data processing with MS Excel basic tools.

3. Graphs, charts, histograms, ...

4. Export / import of data, preparing the data for processing, working with different data formats.

5. Formulas (AutoSum, arithmetic operators, cell values), use of absolute and relative addressing in formulas, use of functions.

6. Important functions: SUMIF, SUBTOTAL, SEARCH, FIND, INDEX, ADDRESS, INDIRECT, COUNTIF, LOOKUP, ROW, COLUMN, LEN, DATE, DATEVALUE, and others. Matrices and matrix formulas.

7. Financial functions and formulas (PV, FV, NPER, PMT, RATE...).

8. Work with databases in Excel. Sorting. Filtering.

9. Pivot Tables.

10. Solving real world business problems in Excel.

11. Solving more complex problems using Solver.

12. Data analysis, time series, and forecasting. Decision support with statistical analysis in MS Excel.

Recommended literature:

Furda R., Greguš M.: Information Systems and Application Software. Comenius University, Bratislava 2021, ISBN 978-80-223-5090-7

Curtis Frye: Microsoft Excel 2016 Step by Step, Microsoft Press 2016, Redmont, ISBN:

978-0-7356-9880-2

Stephen Haag, Maeve Cummings, Management Information Systems for the Information Age, McGraw-Hill Publisher, Denver, San Diego 2009, ISBN 0073376787 / 9780073376783

James A. O'Brien, George Marakas, Introduction to Information Systems, 15/e, McGraw-Hill - Irwin, New York 2010, ISBN 978-0-07-337677-6, MHID 0-07-337677-9

Stephen Haag, Maeve Cummings, Management Information Systems for the Information Age, McGraw-Hill Publisher, Denver, San Diego 2009, ISBN 0073376787 / 9780073376783

Kenneth Laudon, Jane Laudon: Essentials of MIS, 9th Edition, ISBN-10: 0-13-611099-1, ISBN-13: 978-0-13-611099-6, Published by Prentice Hall, © 2011, <http://www.pearsonhighered.com/laudon/>

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Rainer Turban: Introduction to Information Systems: Supporting and Transforming Business, Publisher: Wiley; 2nd edition, ISBN: 0470169001, 2008, 464 pages.

Languages necessary to complete the course:

English

Notes:

The university textbook "Information Systems and Application Software" is available online in web pages of University Library.

Past grade distribution

Total number of evaluated students: 63

A	ABS	B	C	D	E	FX	M
36,51	0,0	15,87	14,29	6,35	6,35	20,63	0,0

Lecturers: Ing. Robert Furda, PhD., Mgr. Andrea Studeničová

Last change: 23.02.2022

Approved by: